## WASTE EVALUATION & ENFORCEMENT BRANCH CHIEF ACTION REQUEST

To:

Lorraine Van Kekerix, Branch Chief

Waste Evaluation and Enforcement Branch

From:

Georgianne Turner, Section Manager Solid Waste Enforcement Section

Prepared By:

Tadese Gebrehawariat, Solid Waste Enforcement Section

Request Date:

February 24, 2011

Action By:

March 15, 2011

**Decision Subject:** Consideration of an Extension to the Compliance Schedule Due Date for a Facility included on the Inventory of Facilities that Violate State Minimum Standards (Inventory), Otay Landfill (37-AA-0010)

## **SUMMARY**

On June 1, 2009, the facility was placed on the Inventory for ongoing violations of 27 CCR, Section 20921 – Gas Monitoring and Control. In response, the San Diego County LEA issued a Notice and Order (Compliance Schedule) to the operator, with a compliance date of February 26, 2010. The operator was unable to meet the timeframes outlined in the original Notice and Order. On February 23, 2010 the LEA granted the operator a one year extension to the Notice and Order to February 26, 2011.

A portion of the landfill's gas extraction system was reported as damaged in October 2008. A violation was first noted in the December 2008 inspection report. High methane readings spread to a number of perimeter monitoring wells. In response the operator installed several gas extraction wells, horizontal collectors, and made other improvements to the gas extraction system. The operator's efforts resulted in bringing all but one of the perimeter gas monitoring wells back into compliance by the end of 2010.

#### **OPTIONS**

- 1. Approve the six month extension for the proposed compliance due date to August 26, 2011.
- 2. Deny the extension to the compliance due date.

## WASTE EVALUATION & ENFORCEMENT BRANCH CHIEF ACTION REQUEST

#### ANALYSIS AND FINDINGS

#### Background

On October 17, 2008 one of the facility's extraction wells, in the vicinity of gas monitoring well GP-13 was taken off line due to damage resulting from high temperatures. The operator conducted investigation of the cause of the high temperatures and began consultations on ways to repair and improve the facility's gas control system. In December the LEA began to note violations on the facility's monthly inspection reports for 27 CCR, Section 20921 – Gas Monitoring and Control, for methane in excess of 5% at the perimeter gas monitoring wells. The violation was first noted at GP-13 in December, but the violation included GP-13, GP-4, and GP-5 in the March 2009 LEA inspection report.

In April 2009 the operator began installation of nine new gas extraction wells. The new landfill gas extraction wells were operational by June 2009. However, two of the new extraction wells were turned off due to a very limited amount of gas in the area of the well.

In August 2009 the facility proposed seven new wells, which were installed in October 2009. Because some of the perimeter gas monitoring wells continued to measure methane in excess of five percent by volume, in February of 2010 the facility operator began installing additional extraction wells and made upgrades to the facility's gas extraction system. The extraction wells and system improvements have shown corresponding results in a decrease in methane levels and in the number of monitoring wells in excess of the regulatory limit.

#### FINDINGS:

The owner and operator have made significant progress and good faith effort in bringing the facility back into compliance. Additionally, the landfill gas issue was more extensive than originally assessed. Based on the factors set forth in 14 CCR 18084, the operator has made a good faith effort and the LEA is taking appropriate enforcement. Therefore it is reasonable to grant the additional time to bring the facility into full compliance and to insure that their improvements to the facility's gas control system will be sufficient to adequately control the facility's gas generation.

### RECOMMENDATION

CalRecycle staff recommend that the facility be granted a six-month extension.

## **BRANCH CHIEF ACTION:**

On the basis of the information in this Request for Action, I heareby issue, pursuant to 14 CCR, Section 18365(b), approval of a six month extension to the owner and operator of the Otay Landfill (37-AA-0010) to August 26, 2011.

Dated: 3/15/11

Lorraine Van Kekerix

Branch Chief

Waste Evaluation and Enforcement Branch

Attachment (Request Letter)



JACK MILLER

# County of San Diego

ELIZABETH POZZEBON

ASSISTANT DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH SOLID WASTE LOCAL ENFORCEMENT AGENCY

5500 OVERLAND AVENUE, SUITE 110 SAN DIEGO, CA 92123 (858) 694-2888 FAX (858) 495-5004 1-800-253-9933 www.sdddeh.org

February 24, 2011

Lorraine Van Kekerix, Branch Chief Department of Resource Recovery and Recycling Waste Evaluation and Enforcement Branch 1001 I Street, MS 10A-16 P.O. Box 4025 Sacramento, CA 95812-4025

REQUEST FOR DEADLINE EXTENSION FOR COMPLIANCE WITH THE COUNTY OF SAN DIEGO SOLID WASTE LOCAL ENFORCEMENT AGENCY NOTICE AND ORDER 09-02, OTAY LANDFILL (37-AA-0010)

Dear Ms. Van Kekerix:

Pursuant to California Code of Regulations, Title 14, Section 18365, the County of San Diego Local Enforcement Agency is requesting approval from CalRecycle to extend the compliance date of Notice and Order 09-02 by an additional six months to August 26, 2011.

#### Background

On June 1, 2009, CalRecycle notified San Diego Landfill Systems of the "Inclusion" of the Otay Landfill (37-AA-0010) in the Inventory of Solid Waste facilities Which Violate State Minimum Standards pursuant to Public Resource Code §44104.

On June 17, 2009, San Diego County Solid Waste Local Enforcement Agency (LEA) issued Notice and Order 09-02 to Otay Landfill Inc. for failure to comply with landfill gas concentration regulations as specified by California Code of Regulations (CCR), Title 27, section 20921(a)(2). The Notice and Order specified a final compliance date of February 26, 2010 for full compliance with landfill gas regulations pursuant to CCR Title 14 section 18365(b).

Notice and Order Section III, Items I and 2 required the operator to:

- Submit by the 15<sup>th</sup> of each month, monthly monitoring results of the previous 30 days for perimeter monitoring wells which exceed 5% methane and to include efforts made by the operator to achieve compliance with the aforementioned violation.
- Achieve compliance with the landfill gas control standards (<5% by volume) by February 26, 2010

The operator had not achieved full compliance with Notice and Order Section III, item 2 by the specified date. There were two perimeter probes (GP-5A and GP-13) that exceeded 5% methane.

The LEA had determined that the barriers to compliance with Notice and Order 09-02 have been beyond the control of the facility operator's initial efforts. The LEA determined that the landfill operator had taken significant steps towards compliance by:

- Installing 30 new extraction and control wells with additional lateral collection and control lines:
- The 18" perimeter main header collection line was extended over 2,800 feet in order to increase vacuum and allow increased control of extraction along the eastern side of the landfill;
- Four additional horizontal collectors were added to the current active fill area in the eastern phase of the landfill;
- The operator has established a program with the third party landfill gas to energy plant,
  Covanta, to coordinate gas collection efforts to target maximum gas collection and minimize fluctuations in landfill gas collection;
- The operator had obtained an Operating Permit and Title V Permit from the local Air Pollution Control District (APCD) to allow certain wells to operate at 145 degrees in areas with high methane concentrations, and
- The operator continues to comply with Notice and Order Section III, item #1.

## One Year Extension of the Compliance Deadline

On February 23, 2010, the LEA granted Otay Landfill Inc. a one year extension to comply with Notice and Order Section III, item #2 by February 26, 2011. As a condition of approval for a one year extension, the operator was directed to:

- Install additional gas extraction and control wells and increase the 18" header by 5,000 feet to allow the system to be fully looped so the gas collection will not be affected by the third party gas to energy plant fluctuations.
- Upon approval of the Title V Permit from APCD, target areas in the older sections of the fill area that have high methane concentrations. (Prior to approval from APCD, the operator could not harvest landfill gas due to temperature exceeding 131°F.)

The operator completed the new landfill gas construction work in July 2010 by completing the following:

- Extension of approximately 5,000 feet of header system to complete the "loop" of the landfill gas recovery system;
- Drilling of 13 new landfill gas vertical wells;
- Installation of six new horizontal collectors; and

 Installation of a variable drive blower system (VFS) in order to help maintain consistent vacuum and minimize fluctuation caused by Covanta landfill gas to energy plant.

Based on the December 9, 2010 LEA inspection and the operator's December 15, 2010 monthly report, perimeter probe GP-5R was the remaining probe out of compliance. As a result, in December 2010, Otay Landfill Inc. completed the following actions:

- Installation of an additional landfill gas vertical well (SVE 18) near perimeter probe GP-5R.
- Achievement of landfill gas compliance for all perimeter probes beginning on December 27, 2010 as illustrated on the fourth quarter monitoring event dated December 27, 2010 and the February 11, 2011 monthly report.

During the LEA February 14-15, 2011 routine inspection, perimeter probe GP-5R was verified to be in compliance. However, during the February 14 and 15, 2011 LEA inspection, engines #3 and #4 of the Covanta landfill gas to energy plant had been taken off line for extensive maintenance (over-haul). Perimeter probe GP-1R was affected by the shutdown of the engines and exceeded 5% methane. Perimeter probe GP-1R had one exceedance during the operator's weekly monitoring event on November 9, 2010 (with a reading of 7.8%) but had otherwise been in compliance since August 31, 2010.

- On February 18, 2011, the operator notified the LEA that adjustment to the landfill gas extraction wells in the vicinity of GP-1R had reduced methane below 5%; and
- The operator has established advance notice with the Covanta landfill gas to energy plant operator to be informed when significant changes are made to the landfill gas recovery system to minimize fluctuations.

### Six Month Extension of the Compliance Deadline

In light of these findings the LEA proposes to grant Otay Landfill Inc. a six month extension of the final compliance deadline to Notice and Order 09-02 to August 26, 2011. This would allow Otay Landfill Inc. additional time to make adjustments to the landfill gas extraction system during the Covanta landfill gas to energy plant maintenance period. Pursuant to California Code of Regulations, Title 14, Section 18365 ("Compliance Schedule"), the LEA requests approval by the Executive Director to grant this additional extension.

As a condition of approval for a six month extension, the LEA will direct the operator to:

- Maintain compliance for all perimeter probes for a period of no less than three months;
  and
- Continue to comply with Notice and Order Section III, item #1.

The LEA looks forward to your decision and will provide you additional information as necessary to complete a formal review.

If you have any questions, please call me at (858) 495-5799.

Sincerely,

KARILYN MERLOS, Supervising Environmental Health Specialist

Solid Waste Local Enforcement Agency

KLM: at

Enclosure: Notice and Order 09-02

cc: LEA File

ec: Mark de Bie, CalRecycle

Susan Markie, CalRecycle Megan Fisher, CalRecycle John Anderson, RWQCB

Gary Hartnett, APCD

Tom Gardner, San Diego Landfill Systems Neil Mohr, San Diego Landfill Systems

Jack Miller, Director DEH Rod Lorang, County Counsel